

ABSTRACT

There is provided a thin air battery comprising a power-generating element including air diffusion paper and a water repellent film, the power-generating element sealed in a package composed of first and third sheet layers that cover the air electrode side and negative electrode side of the power-generating element, and a second sheet layer disposed in the peripheral portion between the two sheet layers and joined to the two sheet layers. The sheet layers are each composed of a thin film formed by stacking an alkali resistant polymer film having hydrogen gas permeability and a polymer film having gas barrier properties, and in each of the first and third sheet layers, the polymer film having hydrogen gas permeability is disposed on the internal surface side. According to the present invention, a thin air battery that has high energy density and has excellent long-term reliability is provided.